

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:

Eugene A. Woltering et al.

Group:

1651

Serial No.:

09/866,296

Examiner:

Afremova, Vera

Filing Date: May 25, 2001

Title:

Three-dimensional Ex Vivo Angiogenesis System

File No.:

Woltering 98M06.1

CERTIFICATE OF FIRST CLASS MAILING

I hereby certify that the listed enclosures are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents. P.O. Box 1450, Alexandria, VA 22313-1450 on April 21, 2004.

- Reply Under 37 C.F.R. § 1.111
- Declaration of Eugene A. Woltering
- Fee Transmittal Sheet
- Check for \$110.00
- Return postcard verifying receipt of the listed enclosures

Registration No. 33,45

April 21, 2004

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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EE TRANSI	ИIT	ΤΔΙ	Complete if Known			
	VII I		Application Number	09/866,296		
for FY 20	JU4	•	Filing Date	May 25, 2001		
Effective 10/01/2003. Patent fees are sub	ject to ani	nual revision.	First Named Inventor	Eugene A. Woltering		
Applicant claims small entity status	. See 37	CFR 1.27	Examiner Name	Afremova, Vera		
			Art Unit	1651		
TOTAL AMOUNT OF PAYMENT	(\$)	\$110.00	Attorney Docket No.	98M06.1 Woltering		

METHOD OF PAYMENT (check all that apply)			FEE CALCULATION (continued)								
Check Credit card Money Other None			3. ADDITIONAL FEES								
Deposit Account:			Large Fee	Entity_ Fee	Smal Fee	LEntity Fee					
Deposit			20,000/		Code	(\$)	Code	(\$)	Fee Description	Fee Paid	
Account Number			20-009	b	1051	130	2051		Surcharge - late filing fee or oath		
Deposit Account Name Taylor Porter Brooks & Phillips			1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet				
			1053	130	1053	130	Non - English specification				
The Director is authorized to: (check all that apply)				1812	2,520	1812	2,520	For filing a request for ex parte reexamination			
Charge fee(s) indicated below Credit any overpayments					1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action		
Charge any additonal fee(s) or any underpayment of fee(s)					1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner		
Charge fee(s) indicated below, except for the filing fee					4054	440	2254		action		
to the above-id	entified de	eposit	account.		1251	110	2251		Extension for reply within first month	110.00	
FEE CALCULATION				1252	420	2252		Extension for reply within second month			
1. BASIC FILING FEE				1253	950	2253		Extension for reply within third month			
Large Entity Small Entity Fee Fee Fee Fee Description						1,480	2254 2255		Extension for repty within fourth month		
Code (\$)			r co Description	Fee Paid		2,010			Extension for reply within fifth month		
1001 770	2001	385	Utility filing fee		1401	330	2401		Notice of Appeal		
1002 340	2002	170	Design filing fe	э	1402	330	2402		Filing a brief in support of an appeal		
1003 530	2003	265	Plant filing fee	<u></u>	1403	290	2403		Request for oral hearing		
1004 770	2004	385	Reissue filing fe			1,510	1451	•	Petition to institute a public use proceeding		
1005 160 2005 80 Provisional filing fee				1452	110	2452		Petition to revive - unavoidable			
SUBTOTAL (1) (\$)					1,330	2453		Petition to revive - unintentional			
2. EXTRA CLAIM FEES FOR UTILITY AND					1,330	2501		Utility issue fee (or reissue)			
Extra Claims Fee from below Fee Paid				1502	480	2502		Design issue fee			
					1503	640	2503		Plant issue fee		
				= 0.00	1460	130	1460		Petitions to the Commissioner		
				1807	50	1807		Processing fee under 37 CFR § 1.17(q)			
Large Entity Small Entity				1806	180	1806	180	Submission of Information Disclosure Statement			
Fee Fee Code (\$)		Fee (\$)	Fee Des	cription	8021	40	8021	40	Recording each patent assignment per property (times number of properties)		
1202 18	2202	9	Claims in exce	ss of 20	1809	770	2809	385	Filing a submission after final rejection		
1201 86	2201	43	Independent cl	aims in excess of 3	4840	770	2040	205	(37 CFR § 1.129(a))		
1203 290	2203 1	45	Multiple depen	dent claim, if not paid	1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))		
1204 86	2204	43		ependent claims	1801	770	2801	385	Request for Continued Examination (RCE)		
1205 10	over original		-	•	1802	900	1802	900	Request for expedited examination of a design application		
1205 18 2205 9 ** Reissue claims in excess of and over original patent				Othe	Other fee (specify)						
		SUB	TOTAL (2)	(\$) \$0.00			-,,,				
SUBTOTAL (2) (\$) \$0.00						CURTOTAL (C)					
**or number previously paid, if greater; For Reissues, see above					*Red	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) \$110.00					
SUBMITTED BY									Complete (if applicable)		
Name (Print/Type) Ohn H. Runnels						Registra Attorney	ation No /Agent)		35,AS1 Telephone (225) 387-322	1	
Signature			19/12	1/ N.	121	1/	M	//	Date April 21, 200	4	

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Group 1651

Eugene A. Woltering et al.

Examiner Afremova, Vera

Serial No. 09/866,296

Filing Date May 25, 2001

For: Three-Dimensional Ex Vivo Angiogenesis System (File No. 98M06.1 Woltering)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REPLY UNDER 37 C.F.R. § 1.111

Dear Sir:

This Reply is submitted in response to the Official Action dated January 13, 2004.

No further amendments are presented. Claims 1-10, 13, 38, and 39 remain pending in the application.

CERTIFICATE

I hereby certify that this Reply under 37 C.F.R. § 1.111 and the accompanying check for \$110.00 are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 21, 2004.

04/27/2004 AADOFO1 00000102 09866296

01 FC:1251

110.00 OP

John H. Runnels

Registration No. 33,451

April 21, 2004

Enclosed is a check for \$110 for a one-month extension of time, to extend the time for response from April 13, 2004 to May 13, 2004. (37 C.F.R. § 1.136(a)(3)). If this amount is incorrect, please refer to the Deposit Account Authorization previously filed for this application. If any additional extension of time is required, please consider this paper a petition for the total extension of time required.

The January 13, 2004 Office Action had the effect of withdrawing all prior grounds of rejection and objection, and of entering two new grounds of rejection.

Reexamination and reconsideration of the application are respectfully requested.

The § 112, First Paragraph Rejection

Claims 1-5, 7, 8, 10, 13, 38, and 39 were rejected on the ground that the specification "does not reasonably provide enablement for enabling for method of assaying angiogenic potential of a three-dimensional tumor embedded in collagen-containing matrix." (January 13, 2004 Office Action, p. 3)

As paragraphs 2-6 of the enclosed Declaration of inventor Dr. Eugene Woltering demonstrate, the method has been successfully demonstrated in a collagen-containing matrix, namely, one based on ECM gel. The experiments described in Dr. Woltering's Declaration were conducted in essentially the same manner as those reported in the original specification, except as noted, particularly the substitution of a collagen-containing system for the fibrin/thrombin clot system. Obtaining successful results with the collagen-based system was straightforward; undue experimentation was not required.

As Dr. Woltering's Declaration notes (Paragraphs 5, 6), the collagen-based system was less efficient than the fibrin/thrombin clot system. But more important is the fact that the collagen-based system did work, as the specification had correctly predicted.

It is respectfully submitted that the enablement ground of rejection should be withdrawn.

The §§ 102 and 103 Rejections

Claims 1-6, 9, 13, 38, and 39 were rejected under 35 U.S.C. §§ 102(a) and 103 as being anticipated by, or obvious over, the Gulec *et al.* paper, either taken alone or in combination with a secondary reference.

As paragraphs 7-10 of the enclosed Declaration of inventor Dr. Eugene Woltering demonstrate, the Gulec *et al.* paper represents a publication of the inventors' own work. Because the paper was published in May 2001, less than one year before the nearly-contemporaneous May 2001 filing date of the present application, the Gulec *et al.* paper has been removed as a reference.

Applicants also note that the Gulec *et al.* paper was published after the May 2000 provisional filing date whose priority has been claimed under 35 U.S.C. § 119(e). While the provisional priority claim provides an additional basis to remove the Gulec *et al.* paper as a reference, it is not necessary to examine the disclosure of the priority application in detail to resolve this question. Even if one disregarded the effect of the priority application, the paper would still represent a publication of the Applicants' own work made less than one year prior to the filing date of the present application.

It is respectfully submitted that the Gulec *et al.* paper has been removed as a reference, that all prior art rejections have thereby been overcome, and that all §§ 102 and 103 rejections should therefore be withdrawn.

Conclusion

Allowance of Claims 1-10,13, 38, and 39 at an early date is respectfully requested.

Respectfully submitted,

John H. Runnels

Taylor, Porter, Brooks & Phillips, L.L.P.

P.O. Box 2471

Baton Rouge, LA 70821

Registration No. 33,451

Telephone (225) 381-0257

April 21, 2004